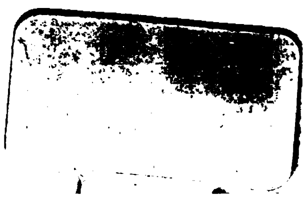
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OUTLINES

OF

STUDY AND INSTRUCTION

IN THE

THEORY AND ART

OF

TEACHING

BY

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PREFACE.

These outlines are products of some reading and study, and of some observation and experience while teaching in various grades of schools, and especially while aiding in the instruction of teachers in the Normal School and in other places.

The course is designed to meet the wants of students such as usually seek the advantages of normal teaching and training.

No attempt has been made to formulate a system of educational philosophy, or to produce anything original, or new to advanced students. Ideas, truths, and principles have been sought and freely appropriated from any fruitful source.

The printing is not for the purpose of publication, but for personal convenience and the convenience of classes.

It is in contemplation to publish, at an early day, a tolerably full manual upon the same subject.

Michigan State Normal School,
Jan., 1883.

OUTLINES

OF

Study and Instruction

IN THE

THEORY AND ART OF TEACHING.

I.

Introduction.

1. **Art** has usually preceded Science in the order of human development, and in the progress of civilization. This is the order of history and of original investigation.

2. **When a Science and an Art** are correlated, the order of study for mature minds is

   (*a*). The Science.—Theory.

   (*b*). The Art.—Practice.

3. **Practice** only, without a study of principles, produces copyists, workers by rules, artisans.

4. **Science,** the study of Theory alone, leaves us without practical skill, without training.

5. **The best results,** in all departments of human activity, come from the proper combination of Science and Art.

6. **The Art of Teaching** (Education in one sense) has been long practiced. **The Science** is only in a formative condition.

7. **The Science** may be investigated and studied by

(*a*). Induction.—By experiment and observation.

(*b*). Deduction.—By reasoning from the known laws of mind and from the nature of knowledge.

II.

What Education is as a Work, Etc.

1. **Preparation** for any work is determined, as to extent and character, by one's conception of the nature of the work.

2. **The Child.**—Condition in respect to (*a*) body, (*b*) mind, (*c*) knowledge, (*d*) language, etc.

3. **The Man.**—Condition in same respects.

4. The child, transformed into the man, has been

(*a*). Developed.

(*b*). Trained.

(*c*). Instructed.

A *work* has been wrought upon him and he has passed through a *process*.

5. **The work and process** have embraced

(*a*). Physical Education.

(*b*). Intellectual Education.

(*c*). Moral and Religious Education.

(*d*). Industrial Education.

The work, great and complex; the field wide.

6. **The Agents and Agencies** in performing the work have been many.

(*a*). The home, parents, friends.

(*b*). The church, religious teachers.

(*c*). Society, books, papers, etc.
(*d*). Institutions, government, etc.
(*e*). Occupations, business, etc.

7. **Province and work** of the Public School and the teacher:

(*a*). Physical education to a limited extent only.
(*b*). Intellectual education mainly.
(*c*). Moral education considerably.
(*d*). Industrial, not largely.

8. **Unreasonable demands** upon the schools and teachers.

Unjust criticisms upon them in respect to (*a*) morals, (*b*) practical skill, etc., (*c*) aversion to manual labor, etc.

9. **Definition.**—*As a work and process, education is the harmonious development; the proper training; and the right instructing of the whole human being.*

10. **The Result.**—*The production of power by development; the creation of habits and skill by training; and the securing of intelligence and virtue by proper instruction.*

III.

What Education is as a Science and Art.

1 As a subject of study, the Science or Theory of Education must include a knowledge of

(*a*). **All the powers and faculties** of the human being.

(*b*). **The Laws or Conditions** which govern the right development and proper training of these powers and faculties.

(*c*). **The means, methods and appliances** by which the work of development, training and instructing is best carried forward.

2. **The Art of teaching** is the practical application of the principles of the science to the work of education.

IV.

Theory or Science.

The powers and faculties of the human being.

1. **Methods of study** and investigation:

(*a*). Observation and study of one's self.

(*b*). Observation and study of others, especially of children.

(*c*). Study of books upon the subject.

2. **Man** is a complex being, having

(*a*). **A body.**—A physical nature.

(*b*). **A soul.**—A mental, moral and spiritual nature.

These are intimately related. Neither can be thoroughly understood without some knowledge of the other.

They are mutually dependent and mutually helpful.

3. Some general knowledge of Physiology is pre-supposed. The nervous system is so intimately connected with mental action that it demands special attention.

(*A*). **The general, cerebro-spinal, system** consists of

(*a*). The Brain.

(*b*). The Spinal Cord.

(*c*). The Nerves,—smaller cords of nerve substance.

(1). Composition and structure of nerve substance.

(*a*). White, minute fibers.

(*b*). Grey, cells or corpuscles.

(2). Origin and termination of the nerves.

(*B*). **The Sympathetic System** of nerves. Its relation to the vital organs and processes.

Less intimately associated with mental processes.

(*C*). **Relation of the Cerebro-spinal Nerves to Sensation** in general.

(*a*). Impressions upon the nerves.

(*b*). Transmission.—Comparison of the telegraph and telephone.

(*c*). The result.—Sensations, so-called.

The **impression** upon the bodily organ is to be carefully distinguished from the **knowledge** gained by the mind.

(*D*). **Nerves of Special Sensation,** and their general functions. The senses.

(*a*). **Taste.**—Organs and location,—office.

(*b*). **Smell.**—Organs and location,—office.

(*c*). **Touch.**—Organs widely distributed,—offices,—higher in rank than Taste and Smell.

(*d*). **Hearing.**—Organs and location,—office, importance and value.

(*e*). **Sight.**—Organs and location,—office,—highest in rank and value of the senses.

The special knowledge derived through each sense will be further considered in connection with suggestions in relation to its cultivation and training.

V.

1. **The Soul or Mind** in man is that which knows, feels, and wills. Its existence is as evident as the existence of matter.

(*a*). Matter is known by its qualities through the senses.

(*b*). The Soul is known by its activities through consciousness.

For our purpose it is unnecessary to make any distinction between the terms Soul and Mind.

2. **The Activities** of the Soul are manifested in different forms or directions;—activities which result in

(*a*). **Knowledge.** These are named Intellect or the Intellectual Faculties.

(*b*). **Feelings,** so called. These are named Sensibilities.

(*c*). **Willing,** determining, etc. These are named the Will.

(*d*). **Moral Ideas,** etc. These are named the Moral Nature.

3, Some terms defined.

(*a*). **A Faculty** is an original or native energy or ability of the Soul to do.

(*b*). **Power** denotes both original and acquired ability of mind. It is used also to denote the energies of the body.

(*c*). **Capacity** denotes the susceptibility of the Soul to be affected and influenced; also to receive and contain.

Faculty, power and capacity are often used with essentially the same meaning.

(*d*). **Phenomenon** (plu. Phenomena) denotes anything which really appears either to the senses or to consciousness.

(*e*). **Consciousness** is the "necessary knowledge which the mind has of its own activities and states," or it is the faculty by which the mind knows its own activities and states.

Consciousness, strictly speaking, is a state of the mind, but it is most conveniently spoken of as a faculty.

VI.

The Intellectual Faculties.

1. The knowing faculties of the soul are concerned in the

(*a*). Acquisition, presentation, and perception of knowledge.

(*b*). Retention, reproduction and representation of knowledge.

(*c*). Elaboration, comparison, and classification of knowledge.

VII.

The Acquisitive, Presentative and Perceptive Faculties.

1. Condition and position of a young child.

In a condition of weakness and ignorance, with the nervous organization previously described, the child is placed in the midst of an external world of objects and influences. He has no choice of location or surroundings, and little power to resist their influences.

2. **Sensation.** These external objects, by contact and in other ways, affect and impress the nervous system, more particularly the nerves of special sensation. These impressions or influences upon these nerves cause states of mind, or changes in the state of mind, feelings. These feelings or states of mind are called *Sensations.*

The term sensation is often employed to denote both the bodily affection and mental state.

3. **First kind of knowledge.** The cognition of these feelings, states or changes of state of mind, by consciousness, must be the first act of knowing, and the sensations themselves the first knowledge.

4. **First step in education.** The exercises of mind in cognizing and distinguishing sensations is the first step in the process of development and training.

5. **Conditions** necessary to the production of sensations, (*a*) mind to be affected, (*b*) objects to affect, (*c*) medium of communication.

In the earliest stages of life, sensations do not necessarily suggest external objects or causes.

6. **Perception.** Simple sensations are, in the process of mental development, soon followed or attended by an activity of mind by which we become acquainted with the external world. The soul, through the senses, cognizes objects outside of itself. This act is perception proper or sense-perception.

7. **Second kind of knowledge.** Consciousness informs us of this new kind of activity and of its resulting knowledge. The pictures, ideas, or notions of external things are called **percepts.** These constitute a second kind of knowledge, much higher in nature than mere sensations.

8. **Second step in education.** The proper development and training of the perceptive faculties is the second and most important step in the work and process of education.

9. **Conditions of perception.**

(*a*). A perceiving mind.
(*b*). External objects.
(*c*). Proper and sound organs of sense.
(*d*.) Favorable conditions and surroundings.

10. **The objects of perception** are qualities of matter.

(*a*). A quality is that in any substance which makes it what it is.

(*b*). Qualities are divided into

(1). Primary or necessary. (2). Secondary or accidental.

Other and more exhaustive divisions are also made.

11. Intuition, Intuitive ideas, truths, etc.

In consequence of knowledge gained through consciousness and perception, the mind cognizes (perceives or conceives) certain simple or primary ideas and certain simple or primary truths.

(*a*). The knowledge of matter, as necessarily extended is followed by the idea of **space.**

(*b*). The knowledge of the succession of thoughts or events is followed by the idea of duration and of **time.**

(*c*). The observation of change is followed by the idea of **cause.**

(*d*). The ideas of personal **identity,** of **number,** of **right,** and some others have a similar origin.

(*e*). Mathematical and other axioms are examples of intuitively perceived **truths.**

12. **Definition.** Intuition is the faculty by which we acquire certain simple, primary ideas, and perceive certain simple, primary truths.

The term Intuition is of course employed here in a restricted sense and for convenience sake.

13. **Some criteria** of primary truths.

(*a*). They are simple, that is, they cannot be resolved into other truths.

(*b*). They are not derived from observation or experience, but are necessary conditions of these.

(*c*). They do not admit of proof, because nothing more evident can be conceived.

(*d*). They are necessary, that is, a denial of them involves an absurdity.

(*e*). They are universal, that is, we cannot conceive of any time or place where they are not true.

14. Summary and Definitions.

The faculties thus far considered are variously named: **Acquisitive,** because the knowledge derived by and through them is the basis of all subsequent attainments; **Presentative,** because the senses seem to present knowledge directly to the mind; **Perceptive,** because the activity of each one of them may properly be called perception.

The Perceptive Faculties.

1. **Consciousness.**—The faculty of inner or self perception.
2. **The Senses.**—The faculties of external perception.
3. **Intuition.**—The faculty which perceives simple, primary ideas and truths etc

VIII.

The Representative and Reproductive Faculties.

1. The mind is able to form mental pictures, notions, ideas of objects of knowledge and thought when these are not present. These pictures, notions, etc., are, in a certain sense, representatives of the objects.

The ability of the soul to form and hold before itself pictures, notions, etc. of objects not present, is called the **Representative Faculty.**

(*a*). The objects, having never been seen or, in any way, known, may be brought before the mind by descriptions or narrations.

(*b*). The objects having been seen or, in some way previously known, the knowledge of them may be reproduced or recalled by memory.

(*c*). The objects may be simply products of thought, of which notions are formed while the mind is at work.

2. **Real Representation.** In all these cases the representation is to be truthful, accurate, real.

The ability of the mind to form real representations is called the faculty of **Conception.**

The mental products of this faculty are called **concepts** and the act is also called **conception.**

The term conception, as applied to a special faculty, is used in a restricted sense, and is open to objections. Conception enters into nearly all mental processes.

3. **Third Step in Education.** The development and training of the power to form (*a*) accurate, (*b*) distinct, and (*c*) vivid concepts.

4. **Ideal Representation.** The mind has ability to form pictures, notions, etc , of an ideal character, usually complex, not representing any single, real, known object.

The ability of the mind to form ideal representations is called the faculty of **Imagination.**

5. Illustrations of the products of the imagination are found in

(*a*). Historical and other paintings.
(*b*). Some works of fiction.
(*c*). Some forms of poetry.
(*d*). Hypotheses, both scientific and other.
(*e*). Many works of art.

6. The imagination creates forms, combinations, groupings, etc. Material is supplied by other faculties.

The term Fancy is often used as synonymous with Imagination.
It is better to make a distinction.

(*a*). Imagination, proper, creates, etc., within the limits of possibility,—is subject to law.

(*b*), Fancy creates, etc., without regard to possibility or law.

7. **Education, etc.** The development and training of the imagination begin early in connection with conception. It is important in some studies of childhood, but its full development comes later.

8. Memory,—Reproductive Faculty.

(*a*). **The Retention** of knowledge is accompanied by no conscious mental activity. Theories upon this subject belong to the province of purely speculative philosophy. Retention is usually considered one of the functions of Memory.

(*b*). **Memory** is the faculty which reproduces or recalls into consciousness what has been previously known or experienced.

Every perfect act of memory involves also an act of representation. The two acts can hardly be separated.

(*c*). Two forms of the process of reproduction are observable.

(1). Absolute or instantaneous reproduction.

The desired object is recalled by a single mental effort, with no conscious intervening steps.

(2). Reproduction by association and suggestion.

This reproduction is accompanied by conscious intervening steps, and is accomplished by more than one mental effort.

(*d*). **Association and Suggestion** are governed by laws or conditions, called laws of association.

As expressed, these laws are statements of observed facts in respect to mental action, or deductions from such facts.

They are usually divided into

(1). Primary or objective.
(2). Secondary or subjective.

(*e*.) Primary or Objective Laws.

(1). Law of Resemblance or Similarity.

"Similar thoughts and things are mutually suggestive."

(2). Law of Contrast.

"Contrasted thoughts and things are mutually suggestive."

(3). Law of Contiguity.

"Thoughts and things associated in time or place are mutually suggestive."

(4). Law of Special Relationships.

"Thoughts and things related to each other as

(*a*). Cause and Effect,

(*b*). Whole and Parts,

(*c*). Substance and Attribute,

(*d*). Sign and Thing Signified, etc., are mutually suggestive."

(*f*). Secondary or Subjective Laws.

These laws, so called, are rather statements of subjective states or external conditions which influence and modify the action and power of the primary laws.

(1). Law of Attention.

Attention is mental activity turned and held by an act of the will, in a particular direction or upon a particular object. The attention of young children is, to a certain extent, involuntary.

Power to retain and reproduce knowledge depends greatly upon the degree of attention bestowed in acquiring.

(2). Law of Repetition.

The power to retain and reproduce some kinds of knowledge is largely increased by repetition or reiteration.

Reiteration is simply a frequent reproduction of the same or a similar act, state, etc., and falls under the head of similarity.

(3). Law of Lapse of Time.

The power to reproduce knowledge is usually weakened by lapse of time.

(4). Law of Associated Feeling.

Power to retain and reproduce knowledge is greatly increased by associating some strong feeling with its acquisition.

(5). **Law of Natural Mental Peculiarities.**

For reasons not known, most minds reproduce some kinds of knowledge much more readily than other kinds.

In order to deal justly with children, this fact needs to be constantly kept in mind.

(6). **Law of State of Mind, and State of Body.**

The state of mind, and also the state of body, at the time of acquisition, affect greatly the power to retain and reproduce knowledge.

(7). **Law of Habit.**

Habits created by occupations, or professions, or other circumstances, influence the powers of retention and reproduction.

(8). **Law of Definiteness and Clearness.**

That knowledge which is most definitely and clearly comprehended is best retained and most readily reproduced.

9. Relation of the Memory to the other faculties; characteristics, etc.

(*a*). The memory is the servant of the other faculties.

(*b*). It should be cultivated for efficient service, and not for its own sake.

(*c*). The most important characteristics of a serviceable memory are

(1). **Susceptibility.**

This is strictly a characteristic of the mind in general rather than of any special faculty.

(2). **Tenacity.** The power to hold firmly that which is committed to its keeping.

(3). **Readiness.** The ability to respond immediately to any demand.

10. Fourth Step in Education.

The proper development and training of the Memory.

The activity of memory begins in the child very early, but its systematic training can commence only when the perceptive and conceptive faculties have acquired considerable power.

11. Summary.

Representative and Reproductive or Conceptive Faculties.	1. **Conception.**—Faculty of **real** representation.
	2. **Imagination.** — Faculty of **ideal** representation.
	3. **Memory.** Faculty of reproduction.

IX.

The Elaborative Faculties,

Called also Reasoning and Reflective.

1. **Convenient comparison** between certain physical and mental activities, processes, and results.

(*a*). Knowledge taken into the mind, as food into the stomach, in a crude form; material of real knowledge, as food of real nutriment, etc.

(*b*). Various forms of mental activity exercised upon this material of knowledge, as various bodily organs exercise their functions upon food, etc.

(*c*). Results in both cases, changes of form, digestion, re-arrangement, assimilation, etc., etc., and finally, products of practical value to life.

2. **Real Knowing** (true knowledge) consists essentially in discovering *resemblances*, *differences* and *relations*.

To secure such knowledge, there must be

(*a*). **Examination.**—Analysis.

(*b*). **Comparison.**—Process of determining resemblances and differences.

(*c*). **Proper Arrangement.**—Synthesis,—classification,—recognition of relations, etc.

These processes are all complex, and any names employed to designate the mental powers by which they are performed are open to objections, and must be understood in an obviously limited sense.

3. **Abstraction.** In the processes of analysis, comparison, etc., it is often necessary to consider one quality or characteristic of an object apart from all others.

This act of separating is called abstraction, and the mental power by which the act is done, is called the faculty of abstraction.

4. **Generalization.** A common name is given to a number of individuals or objects, on account of certain resemblances, disregarding all points of difference.

This act is called generalization, and sometimes the mental activity which performs it receives the same name.

5. **General names, terms, and concepts.**

By the processes of abstraction, generalization, and conception, the ideas indicated by general and abstract terms, such as man, animal, tree, virtue, etc., are formed.

The power of the mind to form such ideas, notions, etc., is sometimes named Conception.

6. **Judgment. A Judgment, etc.**

Elaboration involves the comparison of percepts with percepts; percepts with concepts; concepts with concepts; partial concepts with total concepts; attributes with objects; etc., etc.

The faculty which compares percepts, concepts, etc., and affirms or denies an agreement between them, is, for convenience, called **Judgment.**

The mental product of the final act is called **A Judgment.**

The product expressed in words is called a **Proposition,** and consists of a subject, predicate and copula. *Ex.* Snow is white.

This kind of mental activity, in its simplest form, begins in the child at a very early period; as early indeed as the material out of which judgments can be formed, is supplied.

7. Reasoning, Reason, etc.

Elaboration also includes processes by which, from certain arrangements and comparisons of knowledge already acquired, new knowledge is attained, or present knowledge is extended and enlarged. In these processes, which are called **Reasoning,** propositions are compared.

The faculty which compares propositions, etc., and thus attains new or enlarged knowledge, is sometimes called **Reason.**

It must be kept in mind that the term Reason is here employed in a special and limited sense, for convenience.

(*a*). **Inductive Reasoning.** This is reasoning from particulars to generals; from individuals to the class; inferring a general rule or law from a number of particular cases, etc.

The basis of this form of reasoning is a belief in the "uniformity of causation."

(*b*). **Deductive Reasoning.** This is reasoning from generals to particulars; from the class to individuals; from a general law to particular cases, etc.

The basis of this form of reasoning is the belief that "whatever is true of a whole is true of all its parts"; or "whatever is true of a class is true of whatever comes under the class"; or "what is part of a part is part of the whole."

(*c*). **The Syllogism.** Examples, etc.

(1). General form and nature.
(2). Premises. Major, Minor.
(3). Conclusion.
(4). Some examples of fallacies.

(*d*). **Demonstrative Reasoning** is employed principally in pure mathematics, and deals chiefly with concepts and relations. The premises being admitted its conclusions are inevitable.

(*e*). **Practical or Probable Reasoning** is employed about actual things, and the affairs of every-day life. It makes use of evidences derived from

(1). **Analogy.** Similarity of relations, etc.

(2). **Experience.** General resemblance.

(3). **Testimony.** Direct evidence of man.

(4). **Circumstances.** Indirect evidence.

(5). **Hypothesis.** Suppositions, etc.

(*f*). **Some Laws of Evidence.**

(1). Of direct testimony.

(*a*). General credibility of the senses when in a normal condition.

(*b*). General credibility of mankind when not improperly influenced.

(*c*). General uniformity in the power of motives.

(2). Of indirect evidence.

(*a*). The fact to be accounted for must be established by direct evidence.

(*b*). The existence of the circumstances must be established by direct evidence.

(*c*). The circumstances or the hypothesis based upon the circumstances, must fully account for the thing to be proved.

10. **General Summary** of the Intellectual Faculties.

(*a*). **Presentative Faculties.**	1. **Consciousness.** 2. **The Senses.** 3. **Intuition.**
(*b*). **Representative and Reproductive Faculties.**	1. **Conception.** 2. **Imagination.** 3. **Memory.**
(*c*). **Elaborative Faculties.**	1. **Abstraction.** 2. **Judgment.** 3. **Reason.**

X.

The Sensibilities.

1. Most, possibly all, acts of knowing are accompanied or closely followed by states or conditions of mind called feelings. These feelings are indefinable, but their **existence** is known

(*a*). In one's self, by consciousness.

(*b*). In others, by bodily appearances.

The **Conditions, Circumstances, causes** which produce them may also be learned.

2. The capacity or susceptibility of the soul to feel is called **Sensibility.**

The various feelings are usually spoken of as Sensibilities.

3. The sensibilities are to be carefully distinguished from the sensitiveness of the body and from sensations.

4. The study of the sensibilities is rendered difficult by

(*a*). The great number of them.

(*b*). Their complex character in many cases.

(*c*). The impossibility of making a satisfactory classification.

5. A knowledge of the feelings, and of the means and methods of **producing, controlling,** and **allaying** them, is of the very highest importance to teachers and parents from the fact that they are

(*a*). The active or propelling forces in the soul.

(*b*). The avenues through which the Will must be reached.

(*c*). The indexes of the true state of the mind and of the real character of purposes and acts.

6. In respect to *origin*, the mental feelings are

(*a*). **Instinctive.** Spring from a natural impulse without reflection, and are, to a considerable extent, common to man and some animals.

(*b*). **Rational.** Appear in consequence of thought and reflection, and are peculiar to man.

(*c*). **Mixed.** Partly instinctive and partly rational.

XI.

Some Divisions of the Sensibilities.

1. Simple, Instinctive Emotions.

These are feelings manifested by young children, and they differ very little in character from the feelings manifested by the young of some animals.

(*a*). **Joyousness.** Manifested in sportiveness, frolicsomeness, etc.

(*b*). **Joylessness.** Manifested by a dejected appearance, disinclination to activity, etc.

(*c*). **Irritability.** Manifested by ill-natured words and conduct, etc.

These are only a few of many feelings springing mostly from bodily conditions, and intimately associated with the earliest sensations of childhood. In young children, they are no indication of moral character. They are felt to some extent, at every period of life.

2. Appetites.

These are not properly sensibilities, but are placed here on account of their intimate connection with desires.

They are usually divided into

(*a*). **Natural or Native.** These are regularly recurring "cravings of the animal nature" occasioned by some need.

Among these are

(1) Hunger, and (2) Thirst.

(*b*). **Acquired or Artificial.** These are cravings produced by habits, and differ from natural appetites in several important particulars.

(1). They are not regularly recurring.

(2). Their strength usually increases with gratification.

(3). Their vigor is not usually diminished by age.

(4). They are not necessary to the life or happiness of mankind.

(5). Their creation and gratification involve considerations of moral right and wrong.

Among these are appetites for (1) Intoxicating Liquors, (2) Tobacco, (3) Opium and other Narcotics.

(*c*). **Relation of Teachers** to the subject of appetites.

(1). To teach by example and precept the proper control of natural appetites.

(2). To abstain personally from the creation and gratification of injurious artificial appetites.

(3). To teach, at proper times and by proper methods, the effects of the gratification of injurious artificial appetites upon both body and mind.

Natural appetites are necessary to individual well-being, and to the perpetuity of the race. Their proper gratification involves no question of morals. But they are blind forces, and can never with safety, be allowed to govern a rational being. Artificial appetites are seldom beneficial, and often dangerous.

3. Desires.

Desires are cravings of the mind for real or supposed good.

Aversion is the opposite of desire. Aversions are as various and numerous as desires, but as they are readily understood from the relation of opposition, it is unnecessary to give them separate consideration.

The term **good,** as here employed, has no moral signification; but denotes anything which will contribute, or which is expected to contribute, to happiness or enjoyment.

Some of the most obvious are the desire for

(*a*). Food, drink, etc.

This comes in consequence of appetite and is closely related to it.

(*b*). Continued Existence.

This is partly instinctive, partly rational; closely related to love of life, but does not always spring from it.

(*c*). Knowledge.

Both intuitive and rational.

(*d*). Society.

At first, intuitive; later,largely rational.

(*e*). Happiness.

It is doubtful whether this should be regarded as a *specific* desire. It may be a *general* desire of which all others are only particular forms.

(*f*) Esteem, Approbation, etc.

Both intuitive and rational. Uses and abuses considered.

(*g*). Superiority.

This is to be carefully distinguished from the desire of power. Its relation to *emulation* considered. Uses and dangers.

(*h*). Power, Authority.

Early manifestations; proper and improper direction.

(*i*). Acquisition of property.

Legitimate direction; abuses; relation to the progress of society, etc.

(*j*). **Complex feelings,** into which either desire or aversion enters largely.

(1). **Hope.**

Composed of desire and expectation Conditions of a strong, or a weak hope Value of this feeling.

(2). **Despair.**

Desire with an absence of expectation. Conditions which increase or diminish the depth of this feeling.

(3). **Discouragement.**

Nature; sources; consequences.

(4). **Apprehension,** alarm, fear, dread, terror, etc.

Nature; distinction between; influence, etc.

(*k*). **Knowledge of Desires specially important to teachers.**

The relation of desire to the Will, which will be indicated further on, makes it of special importance that all persons who are concerned in the control and direction of children, should understand the nature of the various desires, something of their power, and the means by which they are excited and allayed.

4. Affections.

The affections are feelings of the mind directed toward other persons, or objects.

There are strong objections to the use of the term *affections* to denote feelings of ill-will, but no other word has yet been generally accepted to take its place.

NOTE.—Emotions seem to exist *in* the soul without direction: desires to be directed mainly toward *one's self*; affections, toward *others*. Desires and affections are often very closely intermingled.

Some classes of the affections :

(*A*) "**The Beneficent.**" Those having in view the good of their objects.

Of the Beneficent Affections

(1). **The Domestic** have reference to Home and Kindred. Among these are (*a*) Parental, (*b*) Filial, (*c*) Fraternal.

These are partly natural and instinctive, partly rational and and moral.

(2). **The Social** have reference to friends, country, etc. Among these are (*a*) Friendship, (*b*) Gratitude, (*c*) Patriotism.

These are mostly, but not entirely, rational and moral.

(3) **The Philanthropic** have reference to mankind without regard to kindred or country. Among these are (*a*) Good-will to man as man, (*b*) Pity, Compassion, Sympathy, etc.

Some of these are natural and intuitive; others, chiefly rational and moral.

(*B*). "**The Defensive.**" Those having in view self-defense, and the protection of others. Among these are (*a*) Resentment, and (*b*) Indignation.

The first prompts to self-defense, the second to the protection of others.

These are usually, but improperly, classed among the "malevolent" affections. Care, however, must be taken in defining and properly limiting these feelings.

They are natural and intuitive in their origin, but beyond a certain limit are rational and moral.

(*C*). **The Malevolent.** Those having in view ends which work evil, directly or indirectly, to their objects.

Among these are (*a*) Anger, (*b*) Envy, (*c*) Jealousy, (*d*), Revenge, (*e*) Malice, (*f*) Hatred, etc., etc.

These are mostly, but not exclusively, rational and moral.

The malevolent affections are sometimes called **The Passions.**

The term Passion, however, is applied to any mental feeling, when it becomes excessive and beyond control.

(*D*). **Relation of the Affections** to the work of teachers.

(1), The natural affections are especially active in early life.

(2). Children are usually moved and controlled easily through and by the affections.

(3). Right affections should be properly cultivated in the schools.

(4). The control of wrong affections should be taught by example, illustration and precept.

5 Some Higher Emotions.

(*a*). Emotions caused by the Beautiful.

(1). Speculative discussions and theories as to the Beautiful, etc., not important in this connection.

(2). Matter of experience that certain objects, acts, ideas, etc., cause feelings of a peculiarly agreeable character to rise in the mind.

(3). Objects, ideas, etc., which produce such feelings are said to be **Beautiful.**

(4). The ability of the mind to discern the beautiful, in its various forms, and the susceptibility of the mind to enjoy it, are called **Taste.**

(5). Among the elements of the beautiful in objects are (*a*) form, (*b*) color, (*c*) symmetry, (*d*) grouping, and (*e*) variety.

(6). Some sounds and combinations of sounds are properly regarded as beautiful.

(7). To cultivated minds, certain ideas and combinations of ideas are beautiful.

(8) Poetry derives its beauty from the ideas expressed and from the rhythmic flow of words.

(*b*). Emotions caused by the Sublime, Grand, etc.

(1). Experiences of these feelings by one on the summit of a lofty mountain; at Niagara; gazing upon dark, heavy thunder-clouds, etc.

(2). Obvious elements in the sublime, etc., are (*a*) power, (*b*) greatness of some kind.

(3). Actions, ideas, etc., may be sublime as well as objects.

(4). Fear, terror, etc., may be mingled with the emotions produced by the sublime.

(*c*). Emotions occasioned by Wit, Humor, etc.

(1). A great variety of these emotions, etc.

(2). Surprise and incongruity among the important elements in the humorous, ludicrous, etc.

(3). A tendency in wit, humor, etc., to descend.

(4) Sarcasm, wit, etc., to be employed very sparingly in the school.

(*d*). Relation of the Higher Emotions to Education, etc.

(1). Good Taste in deportment, language, dress, etc., not only indicates character, but exerts a reflex influence as well as an influence over others.

(2). The feelings produced by the Sublime, Grand, etc., are closely related to Reverence, Respect, etc., and are especially to be desired in the young.

(3). The influence of the School and the Teacher should exert positive power in the culture of Taste, Reverence, etc.

6. Summary of the Sensibilities.

(*a*). Simple, Intuitive Emotions.
- (1). Joyousness,
- (2). Joylessness,
- (3.) Irritability, etc.

(*b*). Appetites.
- (1). Natural.
  - (*a*). Hunger,
  - (*b*). Thirst, etc.
- (2). Acquired for
  - (*a*). Intoxicating Liquors,
  - (*b*). Tobacco,
  - (*c*). Opium, etc.

(*c*). Desires for
- (1). Food, etc.,
- (2). Existence,
- (3). Knowledge,
- (4). Society,
- (5). Happiness,
- (6). Esteem, etc.,
- (7). Superiority,
- (8). Power,
- (9). Acquisition of Property,
- (10). Complex feelings.
  - (*a*). Hope,
  - (*b*). Despair, etc.,
  - (*c*). Apprehension, etc.

- (*d*). Affections.
  - (1). Beneficent.
    - (*a*). Domestic,
    - (*b*). Social,
    - (*c*). Philanthropic.
  - (2). Defensive.
    - (*a*). Resentment.
    - (*b*). Indignation.
  - (3). Malevolent.
    - (*a*). Anger,
    - (*b*). Envy,
    - (*c*). Jealousy,
    - (*d*). Revenge,
    - (*e*). Malice,
    - (*f*). Hatred, etc., etc.

- (*e*) Higher Emotions, produced by the
  - (1). Beautiful,
  - (2). Sublime, etc.,
  - (3). Wit, Humor, etc.

XII.

The Will.

Before putting forth any voluntary activity, either of body or mind, we are conscious of *choosing* and *determining* to act.

The ability or power of the mind (*a*) to choose and (*b*) determine is called the Will.

Theories and discussions concerning its nature, freedom, etc., are aside from the present purpose.

(*a*). Choice.

Choice involves several considerations.

(1). An Alternative.—More objects than one.

(2). Freedom of mental action.

(3). Deliberation.—Time for the action of Judgment.

(4). Conflicting or opposing motives and influences.—Reasons for and against, etc.

(5). Finally a desire, springing up in consequence of examination, deliberation, etc.

An ultimate analysis, I believe, reveals a *desire*, of some sort, preceding every act of choosing. It may be a desire to avoid one alternative rather than to enjoy the other. According to this view, desire is the universal ultimate motive.

(*b*). Motives.

The word is used to denote

(1). The external objects, considerations, influences, etc., which produce in the mind the feelings which induce choice and determination.

(2). The feelings of mind which precede and cause choice and determination.

Much confusion of thought is occasioned by the careless use of the term motive, even by writers upon Psychology.

(3). Classification of Motives.

Various classifications are given by different authors, but none of them are of special importance to our work. A clear conception of the *relation* between the Will and the other faculties is of the highest importance, especially to teachers.

(*c*). Determination or Volition.

The final mental act which follows choice is usually called Executive Volition.

Having *chosen* an object or course, one *determines* or decides to act in order to secure it.

Obstacles, known or unknown, may prevent the consumation of an outward act, but they cannot interfere with the laws of mental activity.

XIII.

Relation of Intellect, Sensibilities and Will.

(*a*). **General Statement.** In a regular and complete series of mental acts, the order is

(1). **Knowing.**—Activity of the Intellect.

(2). **Feeling.**—Activity of the Sensibility.

(3). **Choosing and Determining.**—Activity of the Will.

The intuitive emotions of early childhood, infancy, probably are not preceded by any conscious knowledge.

(*b*). **Reflex Influence.** (1) The Sensibilities, when excited, re-act upon the Intellect, and, in most cases, quicken and help its activity. (2) The Will, moved by desire, gives direction and persistency to the action of the Intellect.

This is illustrated by the eagerness and perseverance with which one pursues any object or purpose which is said to *interest* him; that is, which excites in his mind some strong feeling.

(*c*). **Practical Inferences.**

(1). Neither the Will nor the Sensibilities can be approached and moved directly. They must be reached through the Intellect.

(2). If the ultimate object in view is to produce some change of conduct, or to secure ends involving what is known, or supposed, to be disagreeable, the approach must be skilful as well as indirect. Otherwise the feelings excited will be the opposite of those desired.

(3). No mode of management and government in a school can be good which does not take into account the relation of the faculties, and the right way of reaching the Will.

XIV.

The Moral Nature.

(*a*). **Difficulties in the discussion** of this part of man's nature, real and imaginary, arising from

(1). Its connection with the Spiritual and Religious elements in his nature.

(2). Its relation to practical questions of conduct, obligation, responsibility, etc.

(3). Differences of opinion and belief as to the bases of morals, of obligations, of moral laws, etc.

(*b*). General Ideas, Beliefs, etc.

(1). Men universally have the *idea* of a moral right and wrong in human character and conduct.

The universality of this idea indicates its intuitive origin.

(2). Men universally have a "moral consciousness;" that is, *feelings* of approval and disapproval of their own and others' character and conduct.

(3). The idea of a right and wrong, and a feeling of approval and disapproval, necessarily compel or imply the belief in a *self-directing* power in man.

An *automaton* can do no wrong, and can merit neither approval or disapproval.

(4). Both consciousness and observation testify to the power of the human will to give preference and preponderance to one motive over another, or to choose with a large degree of freedom.

The phrase, "strongest motive," as it is usually employed, is unfortunate and misleading.

The great influence of "heredity and environment" is freely admitted by all candid minds. The very fact that these do have so much power, renders the demand for moral education more imperative.

(5). Punishment can rightfully be inflicted by parents, teachers, and civil officers, only upon beings who have power of self-determination.

Machines are not punished.

(*c*). **Absolute necessity** for the Moral Development, Training, and Instruction of children, obvious from several considerations.

(1). Human society would be intolerable, if it could exist, without the restraints and influences of positive morality,—of authoritative moral laws and obligations.

(2). It is impossible to conceive of society without such restraint under any form of government.

(3). Such restraints and influences are especially necessary where there is the least possible restraint from civil law, and the greatest possible degree of individual freedom.

(4). They are still more necessary where the civil laws themselves derive their character and efficiency from the body of the people.

(5). History, observation, and experience unite in teaching the value and importance of instruction and training in the "every-day" virtues of truthfulness, honesty, integrity, purity, etc., etc.

(6). Intellectual culture and intelligence, while they free from many low and vulgar vices, elevate and refine the taste, and bring incalculable benefits to society, do not, alone, insure practical morality.

XV.

Analysis of the Moral Nature.

The moral nature cannot be separated from the other faculties and powers of the mind.

Some of its activities are the same as those of the intellect, simply turned in another direction and exercised upon different objects.

The Moral Nature is composed of

(1). **Faculties.**—Abilities to do, etc.

(2). **Sensibilities.**—Susceptibilities to feelings, that is, to emotions, affections, etc.

(*A*). The Moral Faculties.

(1). **Moral Intuition.** The Faculty which gives the primary and simple idea of right and wrong.

This idea is merely of the existence of such a distinction, and not that particular states, acts etc., are right or wrong.

(2). **Moral Sense or Perception.**—The Faculty which discerns the moral qualities of simple states, acts, etc.

(3). **Moral Judgment.**—The Faculty which examines, compares, and decides in respect to all questions of moral right and wrong.

This Judgment is the intellectual judgment exercised upon moral questions. In both cases, it performs the same offices, and is subject to the same laws and limitations.

It decides according to its *knowledge*, after examination and comparison, and according to the *standard* which has been received and adopted.

Sources of Knowledge.

The Judgment derives its knowledge from,

(*a*). The Moral Sense.—Perception.

(*b*). Education, in the home, church, school, etc.

(*c*). Customs, Habits, etc., observed in traveling abroad.

(*d*). Civil Law, in matters relating to the duties and obligations of citizens, etc.

(*e*). Revelation. This will apply only to those who believe in a Revelation.

Standards of Judgment.

In a final analysis they are reduced to two.

(*a*). Rules of conduct, or general Principles of living, made known by a Moral Governor.

(*b*) Considerations of Utility. Rules of conduct, or Principles of living based upon the nature of man and upon the teachings of experience.

The two standards would undoubtedly be found to agree if human wisdom could fully master and comprehend them.

(4). **Conscience.** The Faculty which insists that the decisions of the Moral Judgment shall in all cases be obeyed.

In other words, that Power or Principle in the Soul which insists that we shall be and do what we believe, after the most careful and honest examination, to be right, and shall abstain from being or doing what we believe to be wrong.

It need hardly be said, even to avoid misconstruction, that belief is not a standard of right.

(*a*). Conscience, as defined, is always to be obeyed. It makes no mistakes.

(*b*). Moral Judgment may, and often does, err.

(*B*). The Moral Feelings.

(1). Simple Emotions of Satisfaction and Dissatisfaction.

These are almost intuitive, and appear at an early period of life. They are closely connected with the simplest intellectual emotions, and have no definite relation to character.

(2). **Feelings of Obligation.**

These are at first weak, but gradually become stronger as the Moral Judgment matures.

(3). **Feelings of Approbation and Disapprobation.**

These are directed toward one's self and also toward others. They are the ripened form of the simple emotions, and have a definite relation to character and conduct. Intensified, they become the feelings which follow obedience or disobedience to the authority of Conscience.

(4). **Moral Desires and Affections.**

These are the general Desires and Affections taking directions which involve moral considerations.

(5). **Higher Moral Emotions,** arising from objects, ideas, etc , possessing moral Beauty, Grandeur, etc.

These differ from the intellectual emotions chiefly in respect to the objects which produce them.

(*C*). Practical Suggestions.

(1). The conduct of life can be satisfactorily directed, either for one's self or for others, only by general *Principles* of living, not by definite *Rules*.

Childhood, either of individuals or of the race, requires rules; Maturity, principles.

(2). Every well-ordered life has a definite moral purpose or end in view.

Things which may or may not be done, in living such a life, divide into the (*a*) Morally Right, (*b*) Morally Wrong, and (*c*) Morally Indifferent.

A decision as to the first two is easy; as to the third the determination should be predicated upon the general influence which doing or not doing, etc., will have upon (1) one's own power to accomplish the main purpose of life, and (2) the general influence upon others.

(3). Power to benefit others morally depends, chiefly, upon personal character, and good character is the natural outgrowth of good Principles.

(*D*). Summary of the Moral Nature.

(1). Faculties.
- (*a*). Moral Intuition.
- (*b*). Moral Sense.
- (*c*). Moral Judgment.
- (*d*). Conscience.

(2). Feelings.
- (*a*). Simple Emotions of Satisfaction and Dissatisfaction.
- (*b*). Feelings of Obligation.
- (*c*). Feelings of Approbation and Disapprobation.
- (*d*). Desires and Affections.
- (*e*). Higher Emotions, etc.

XVI.

PART SECOND.

Laws or Conditions of Development, etc.

The consideration of these laws, and of some inferences and dednctions from them, constitutes the second part of the study of the Theory of Education.

The term law, as here employed, includes facts, conditions, circumstances, etc., under and according to which the human being is best developed, trained, and instructed.

1. First Law.—Order of Development, etc.

The Human Powers and Faculties are developed, etc., in a natural and regular order.

This law is obvious, but not equally so, in all divisions of the complex nature of man.

(*A*). Order in the Body.

(1). **The Digestive and closely related systems.** Necessary to mere animal existence.

(2). **The Nervous, Muscular and related systems.** Necessary to self-adjustment to surroundings, to self-support, etc.

(3). **The Reproductive system.** Necessary to the perpetuity of the race.

(*B*). Order in the Mind.

(1). **In the Intellectual Faculties.**

(*a*). **The Perceptive Faculties.** The Senses, Powers of Observation by which Knowledge is immediately acquired.

(*b*). **The Representative and Reproductive Faculties.** Retention, Reproduction, Representation are mental activities possible only after some acquisition through the senses.

(*c*). **The Elaborative Faculties.** The processes of Elaboration are possible only after acquisition and representation.

The fact is, of course, recognized that the second and third classes of faculties have the *beginnings* of their activities at a very early period of a child's life.

(3). In the Sensibilities.

Since feeling necessarily follows or attends knowing, the development of the Sensibilities must be co-ordinate with the development of the Intellect.

The steps of progress, however, are not so distinct and obvious in the Sensibilities. They can be indicated only in a general way.

(*a*). The simple, instinctive Emotions and the natural Appetites.

(*b*). The Affections and Desires.

(*c*). The Higher Emotions.

(3). In the Will.

The development of the power and energy of the Will is clearly progressive, but the progress does not admit of separation into sharply defined steps.

As the activity of the Will is conditional upon the activity of both the Intellect and the Sensibilities, its development must be co-ordinate with their development in a mind rightly cultivated.

(4). In the Moral Nature.

Some elements of the Moral Nature can be distinguished and separated from similar elements of the Intellect and Sensibilities only in thought. The order of development of this nature must, therefore, be essentially that of the Intellect.

(*a*). Moral Sense, Perception and simple feelings of satisfaction and dissatisfaction. [Simple Emotions.]

(*b*). Moral Judgment and the feeling of Obligation. (Moral Affections, Desires, etc.)

(*c*). Conscience and the Higher Emotions.

All the moral powers have the *beginnings* of their activities at an early period of life, but somewhat later than the Intellectual powers.

2. **Inferences and Deductions** from the first Law, and Applications of its teachings.

(*A*). **School Life is naturally divided into three Periods.**

(*a*). **Primary or Elementary Period, Childhood,** of which the prominent characteristics are,

(1). **Body.** Constant, varied and apparently aimless activity. Not capable of sustained effort. Vigorous natural appetites.

(2.) **Intellect.** Special activity of the senses, the observing faculties.

(3). **Sensibilities.** Great susceptibility to simple emotions, and to sudden changes of feelings. Curiosity specially active but easily satisfied.

(4). **Will.** Little steady or controlling power of Will.

(5). **Moral Nature.** Moral faculties and feelings show but little activity or strength. Notions of right very indefinite, and feelings of obligation scarcely discoverable.

(*b*). **Secondary or Transition Period, Youth,** of which the most obvious characteristics are,

(1). **Body.** Vigorous, but intermittent and less aimless activity. Rapid increase of strength. Capable of effort considerably regular and sustained. Natural Appetites vigorous and a tendency to the formation of artificial ones.

(2). **Intellect.** Senses still active. Representative and Reproductive faculties becoming specially active. Ready mastery of facts, processes, and simple relations, etc.

(3). **Sensibilities.** Desires and Affections rapidly developing, and easily kindled into passions. Tendency to excessive activity of some of the defensive and malevolent feelings.

(4). **Will.** Rapidly increasing in power, but still intermittent and unreliable except under the impulse of strong and present motives.

(5). **Moral Nature.** Moral Judgment slowly developing but unreliable. Feelings of Obligation gaining strength under right instruction. Conscience beginning to exert considerable power.

(*c*). **Period of Maturity, Manhood,** of which the marked characteristics are,

(1). **Body.** General maturity of all its powers. Little aimless activity. Capability of vigorous and sustained effort.

(2). **Intellect.** Approaching harmonious and full development of all the Faculties. The Elaborative Faculties especially active.

(3). **Sensibilities.** The Rational feelings and especially the Higher Emotions exhibit marked activity.

(4). **Will.** Becoming strong and reliable under the impulse of ordinary motives.

(5). **Moral Nature.** Moral Judgment, Conscience, and the higher moral feelings act with more efficiency and regularity.

(*B*). **Schools are naturally divided into three kinds.**

(*a*). **Primary or Elementary Schools.** (Primary Departments of Graded Schools.)

These should be adapted to the characteristics and needs of childhood in respect to (1) Buildings and Appliances, (2) Organization, (3) Management, (4) Subjects and Hours of study, and (5) Methods of Instruction.

(*b*). **Secondary Schools.** (Grammar and first years of High School Departments of Graded Schools.)

These should be adapted, in the particulars before named, to the characteristics and needs of the period of **Youth.**

(*c*). **Advanced Schools.** (Last years of High Schools and all Higher Institutions of learning.)

These should be adapted to the characteristics and needs of the period of **Manhood** or Maturity.

(*C*). **Methods, Means and Appliances of Instruction** are naturally grouped for treatment into three divisions.

(*a*). **Primary** or Elementary Methods, etc.

(*b*). **Secondary** Methods, etc.

(*c*). **Advanced** Methods, etc.

Methods, Means etc. should be adapted to the *general characteristics* of both body and mind at each period; to any *special conditions and circumstances;* and to *particular purposes or ends* so far as these are allowed to modify the arrangements and workings of a school.

3. Second Law.—Conditions of Development etc.

The human powers and faculties are developed etc. only on condition of proper Exercise,—of Self-Activity.

Deductions, Inferences, etc.

(*a*). **Adequate Provision** should be made, (1) in School Buildings, (2) in Courses of Studies, (3) in Organization and Management, and (4) in Methods of Teaching, for activity, both of body and mind, adapted to each period of school life.

(*b*). **Physical Activity** should be especially provided for in the Primary School. A well developed body is one of the conditions of a well developed soul.

(*c*). **The Sensibilities and Moral Faculties** require appropriate exercise for their proper development as much as the Intellectual and the Physical natures.

(*d*). A teacher's success may be estimated, with tolerable accuracy by the character and degree of activity excited in pupils.

NOTE.—The purpose in view does not require, at this point, further direct consideration of the physical nature. The laws which follow refer only to the mind.

4. Third Law.—Means of Development, etc.

Materials or Objects of Knowledge and Thought properly presented to the mind, produce this self-activity.

Deductions, Inferences, etc.

(*a*). **The Relation of Knowledge to Education** as a work and process (page 5.—9. Def.) is two fold.

(1). Primarily, *means* to a higher end,—the perfection of the human being.

(2). Secondarily, a subordinate *end* in itself,—to be acquired for the use and adornment of life.

(*b*). **Proper presentation** involves several considerations, indicated here, but discussed in another connection.

Objects of Knowledge etc. must be

(1). Of the proper kind.—Adapted in kind to the (*a*) Period of life, (*b*) Special conditions and circumstances, and (*c*) Subordinate end of use etc.

(2). Of proper form or condition.

(3). Of proper quantity or amount.

(4). Presented in a proper manner, and

(5). At the proper time.

Adapted under each head as specified under (1).

The analogy between the conditions of bodily and mental activity affords convenient means of illustrating the particulars here indicated. The mere presence of proper food, in proper condition, quantity, etc., in the stomach, produces all necessary activity. Digestion, assimilation etc. follow by a necessity of nature if the organs are in health.

The mind, in presence of proper material, acts as naturally and freely. The power of the Will and the influence of surroundings are, of course, to be taken into account.

5. Fourth Law.—Teaching.—Position of the Teacher.

Teaching is the proper presentation of materials or objects of knowledge and thought to the mind of the learner.

Or, Placing the mind of the learner and the thing to be learned in proper relation to each other.

Training is the practice, or repetition of processes etc. by which the learner becomes ready and skilful in the uses and applications of that which has been learned.

Teaching and training rightly combined make up the teacher's work.

The fourth law, so-called, is not, strictly speaking, a law of development. It is stated here in order to indicate clearly the teacher's relation to the work and process of education. The explication and application of this law belong under the next general division.

XVII.

PART THIRD.

Purposes, Means, and Methods of Teaching.

The discussions in this part necessarily embrace, to a greater extent than in previous pages, theory and art combined.

The summaries of Laws, Maxims etc. following, are grouped here chiefly for convenience of reference.

(*A*). Laws of Acquisition.

(1). In its *earliest* learning, the child proceeds from (1) real objects, acts, etc., to (2) ideas, notions, etc., then to (3) words, as names, signs, symbols of objects etc.

In the later periods, after the words have become loaded with meaning, and are suggestive by the laws of association, the order may be, and often must be, (1) words as signs etc. (2) objects, ideas etc., things signified.

(2). The child learns (1) particulars, (2) generals; (1) individuals, (2) classes.

The mature mind usually reverses the order, and learns (1) generals, (2) particulars; (1) classes, (2) individuals.

(3). The child learns (1) facts, processes, etc., (2) causes, reasons, definitions, rules, etc.

This order may be reversed in later periods, but not with advantage unless the language employed suggests clearly and vividly the processes, facts, etc.

(4). In learning properties of bodies, colors, and many other things, the child must proceed from (1) the concrete to (2) the abstract.

When words have become suggestive symbols, this order may be disregarded.

(5) In all periods, the mind acquires knowledge (1) of wholes, (2) of parts, qualities, etc.

The "wholes" of the child are very unlike the "wholes" of the man. The wholes of either may be parts of still greater wholes. It is only necessary that the whole be a unit, complete in itself.

(6). The child acquires (1) *language* early and easily; (2) the *laws* of language later and with more difficulty.

This is only a specific case under general law No. 3.

(7). The mind, especially of the child, can receive only a single object, and only a limited amount of the material of knowledge, at one time.

(8). The acquisitive power of the mind, in order to most productive activity, requires variety of matter of knowledge, and periods of relaxation.

(*B*). Laws of Retention and Reproduction.

(*See Pages* 15—17.)

(*C*). Laws of Elaboration.

The knowledge which the mind first obtains of "the whole" is an indefinite, general ontline; material of knowledge rather than true knowledge.

(1). In Elaboration, the mind first proceeds from the whole to parts, qualities, etc., by analysis.

The extent and character of this analysis will be determined by the age of the learner and by the immediate purpose in view.

(2). In Elaboration, the mind compares the new "unknown" with some old "known," noting differences, resemblances, relations, etc.

The extent of this comparison will be determined by the end in view.

(3). In Elaboration, the mind finally reconstructs by synthesis the whole from the parts into which it has been resolved by analysis,

The first whole of perception or conception is confused and shadowy; the final whole of elaboration is clear and definite.

(*D*). Some Laws of Presentation or Teaching.

These laws are simply correlatives of the laws of Acquisition, Elaboration, etc.

(1). The teaching of Childhood should be largely concrete and objective; and should be adapted to excite and gratify (*a*) the desire for bodily exercise, (*b*) the feeling of curiosity, and (*c*) the activity of the senses, (the observing faculties).

The "object lesson," is only one, and not the most important, variety or form of objective teaching.

(2). In early Childhood, present (*a*) the Individual and Particular before (*b*) the Class and General.

In later periods, the order should generally be reversed.

The child *begins* to make easy classifications and generalizations at a very early age; and should be encouraged and taught to do so, provided these are not simply repetitions of unmeaning terms.

(3). In early teaching, (*a*) Facts, Processes, Ideas Truths, etc., should be presented before (*b*) Causes, Reasons, Principles, Rules, Definitions

In more advanced teaching, this order will often be departed from.

(4). In all periods, present the material of knowledge in the form of wholes which can be resolved into parts by the learner.

The nature of the wholes, parts, etc., is indicated under one of the laws of acquisition.

(5). All subjects should be so presented and treated, especially during Childhood and Youth, as to cultivate the power and habit of correct expression.

Language is to be learned, primarily, not as an *end* but as a *means*. Its acquisition is a necessary condition of all progress in other branches of knowledge.

Things and words must be learned together. The study of the formal *laws* of language is quite another matter.

(6). In teaching, each lesson should have a single, definite purpose, and should present but a limited amount of matter.

"One thing at a time," and not too much of that one, is a maxim of prime importance in dealing with children.

(7). Subjects should be so presented to children as to afford all the variety consistent with the one definite purpose of the lesson.

Unity is a necessity in school work, but this unity should be consistent with variety.

(8). In the presentation of most topics, in the periods of Youth and Manhood, both the inductive and deductive methods will be employed.

The true teacher will employ any method and all methods which help to secure the best practical results, with very little regard for theories concerning "Analysis or Synthesis;" or questions about the "genesis of Knowledge in the race," "the methods of nature," or any other method. No one system, method or creed of education contains all truth.

(9). In the presentation of all subjects, special regard should be had to the proper "laws of association," in order to facilitate retention and reproduction.

Artificial aids to memory have very little permanent value; the aid rendered by right order and arrangement in presentation can hardly be over estimated.

XVIII.

Purposes, Means and Methods, of the Period of Childhood.—Elementary Methods.

General methods of teaching are indicated with sufficient clearness by the laws of Presentation. The statements and discussions which follow are, to some extent, *special* applications of these to the purposes most prominent and important in the different periods.

Purposes, and how attained.

1. **To give proper development and training to the body, and to create good bodily habits.—Physical Culture.**

To secure this, attention must be given to the (1) **School-room** in respect to (*a*) *furniture*, (*b*) *temperature*, (*c*) *ventilation*, (*d*) *light*, etc.

(2). To **The Child** in respect to (*a*) *positions* in standing, sitting, (*b*) *movements* in walking etc., (*c*) *alternation* of action and rest etc., (*d*) *eyes* as to distance of book, direction of light etc., (*e*) *hands and fingers* in the use of articles in writing, drawing, etc.

Exercises in writing and drawing serve other important ends, but they should be made especially valuable in training the eye and the hand.

2. **To develop and train the senses, and create habits of attention and observation.—Culture of the Observing Powers.**

The sense most cultivated in school is *sight;* next to this *hearing;* touch, somewhat; the others, very little.

This will be accomplished by

(*a*). **Furnishing means for using the senses,** as as far as possible, in connection with all lessons and studies of early childhood.

(*b*). **Teaching how to use them,** and by constant training in their use.

(*c*). **Appealing skilfully to curiosity,** the motive power of childhood, and allowing freedom for the activity of the hands and body as well as the eyes and ears.

The arrangements, employments, and methods of the Primary schools should, in many respects, be radically changed.

The introduction of the spirit, some of the "gifts," and modified forms of the employments of the Kindergarten will produce the needed changes.

3. **To commence the acquisition,** on the part of the child, of useful Knowledge.

Early education is a period of *preparation* for acquisition, rather than of acquisition itself. The instruments of acquisition are being sharpened and fitted for use.

Nevertheless, this purpose will be the primary one in the minds of both teachers and pupils. By a most happy provision of nature, the higher end is sure to be reached if right processes and means are employed to secure the subordinate end. Food is taken for the growth and repair of the body, but it is eaten simply to gratify appetite.

This purpose will be secured by properly presenting right materials and objects of Knowledge.

Studies of the Primary school.

(*a*). **Language,** including (1) Conversation, (2) Reading, (3) Spelling, (4) Copying and Composing.

(*b*). **Number and Form.**

(*c*). **Natural Science,** etc., including (1) Common Objects, (2) Animals, (3) Plants, (4) Elementary Geography and History, etc., etc.

(*d*). **Physical Training,** including (1) Writing and Drawing, (2) Singing, (3) Kindergarten Plays, (where practicable).

The laws of Presentation suggest the points for discussion in respect to special methods of teaching these subjects.

XIX.

Purposes, Means and Methods, of the period of Youth.—Secondary Methods.

1. **To cultivate the power of Expression,** and create the habit of using language readily and correctly.

This is accomplished by

(*a*). Securing first clear and distinct ideas, thoughts, etc.

(*b*). Teaching right words and forms of expression.

(*c*). Affording abundant opportunities for practice, both orally and in writing.

These points should be regarded in all lessons and exercises, as well as in special lessons in language.

2. To develop and train the Memory.

This will be secured by

(*a*). Teaching in harmony with the laws of association and suggestion.

(*b*). Compelling pupils to rely upon memory; giving the faculty appropriate exercise.

(*c*). Requiring only a reasonable amount of service; not over-taxing.

The faculty of Conception will necessarily be cultivated in connection with Memory, and also in connection with all lessons learned from books. The Imagination will be called into special service in the study of Geography and History.

3. To Teach especially those studies and parts of studies which involve the learning of facts, processes, descriptions, etc.

Among these studies are

(*a*). Language continued, particularly (1) Reading, and (2) Composing, etc.

(*b*). Arithmetic and Mathematical Forms.

(*c*). Geography and History.

(*d*). Elementary Natural and Physical Sciences.

(*e*). Writing, Drawing, Vocal Music, etc.

The first and second purposes will be accomplished if the work of the third is correctly done.

The laws of Acquisition, Presentation, etc., will suggest the necessary discussion of special methods of teaching the branches named.

XX.

Purposes, Means and Methods, of the period of Maturity.—Advanced Methods.

1. **To develop and train the Faculties of Elaboration,** and to create the habit of judging and reasoning correctly and rapidly.

Accomplished by

(*a*). Presenting proper subjects of study, subjects which naturally *compel* the exercise of these faculties.

(*b*). Teaching by such methods that these faculties *must* be employed rather than mere verbal memory.

(*c*). Giving opportunities for the exercise of these faculties, to a reasonable extent, upon the practical affairs and problems of daily life.

2. To aid in the formation of right character; to prepare pupils for citizenship and for the duties belonging to the various relations of life; and to create habits of self-government and right action.

Accomplished by

(*a*). Influence of right character and conduct in the teacher.

(*b*). Right methods of school management and government.

(*c*). Wise use of the lessons of history, biography, and of current events.

(*d*). Proper appeals to the best and highest motives in the human soul.

3. To teach branches of knowledge appropriate to the period of life, and to the character and design of the school.

The range of studies appropriate to advanced schools is so wide that no enumeration of them is necessary. Selections should be made according to circumstances, conditions, etc.

4. To teach how to study; to develop a taste for study, and to create right habits of study.

5. To give some knowledge of good books in the various departments of history, literature, science, art, etc., and to create a taste for good reading.

Schools, even the best, can do little more, during the brief time of school life, than to prepare pupils for acquiring knowledge, and to indicate where the materials of knowledge can be found. That teacher is guilty of a great wrong who sends pupils out into the world with exaggerated notions of the extent and value of their attainments.

Methods of teaching in this period are readily deduced from the laws previously given.

XXI.

Some Special Topics.

A.

Securing Attention.

1. Attention defined (Page 16, (*f*) (1).

While only that mental activity which is directed and held by the Will, is strictly speaking, attention, yet usage allows us to give that name to such activity directed and held by any means. Consequently we speak of involuntary attention.

2. One most important purpose of education is to give the Will complete control over all the other powers and faculties. All attention is then volitional. The training of the school should tend to this result.

3. Voluntary attention can be given in obedience to a request or command.

Involuntary attention must be caught and held by other means.

4. **Securing the attention of Young Children.**

(*a*). So far as the attention is voluntary it may be requested and commanded, and secured by the motives of (1) rewards, and (2) penalties.

The true teacher will not rely much upon this method in dealing with young children. Other methods are more effective.

(*b*). Make only reasonable demands upon the attention of children. All exercises and lessons should be short.

(*c*). Provide for physical exercise and frequent change of position in connection with all lessons.

(*d*). Excite and gratify *curiosity* in the matter and manner of teaching. Present a subject in such a way that *expectation* is kept constantly alive.

(*e*). Provide for all possible *variety* by means of illustrations, etc.

(*f*). So enter into the subject as to excite the feeling of *sympathy* and to create something of *enthusiasm*.

A *genuine* feeling of interest is contagious. If attention and interest are expected in pupils they must first exist in the teacher.

(*g*). Sometimes, but not often, an appeal may be made to the feelings of *surprise*, *wonder*, etc.

5. Securing the attention of older pupils.

Some of the suggestions as to seating, position of teacher, etc., here made, will apply also to young children.

(*a*). *Determine*, in your own mind, to have attention, and expect to have it.

It is neither necessary nor desirable to repeat frequently that you must have attention. It is not secured in that way.

(*b*). The seating of a class and the position of a teacher aid or hinder in securing attention.

The arrangements should be such that the *eye* of the teacher can readily command a view of every individual in the class.

(*c*). A teacher must show, by all his work, that he has a thorough knowledge of the subject and also of methods of presenting it.

(*d*). Topics should be presented clearly and consecutively, but with very little *repetition*.

(*e*). Questions should be put, as far as practicable, to the class, and then individuals called to answer them.

(*f*). Pupils should frequently be required, at any period in the recitation, to reproduce statements and instructions previously given.

(*g*). When time allows, summaries and recapitulations should be required at the close of a recitation, and also at the succeeding recitation.

(*h*). Speak distinctly, but in an ordinary tone of voice; and do not allow pupils to expect a repetition of explanations, questions, etc.

(*i*). In order to reach exceptional cases, it must be understood that continued inattention will incur appropriate "pains and penalties."

It should be kept in mind that attention on the part of pupils, under ordinary circumstances, is not so much a *condition* of good teaching as a *result* of good teaching. If the teaching is good, the attention will usually be good also.

B.

Art of Questioning.

The relation between Questioning and Attention is such that some repetition is unavoidable.

1. Prerequisites on the part of the questioner.

(*a*). Thorough knowledge of the subject and its relations.

(*b*). Knowledge of the laws of mind, especially of the laws of association and suggestion.

(*c*). Knowledge of the acquirements, condition, etc., of the learner.

(*d*). A definite and present purpose and preparation.

(*e*). Skill acquired by practice.

2. General purposes of questioning.

(*a*). To make the learner conscious of his ignorance as a preparation and an incentive to study. (Socratic questioning.

(*b*). To give the teacher necessary knowledge of the acquirements and condition of the learner.

(*c*). To test ability and skill in applying rules, principles, etc., to new cases, conditions, and circumstances.

These four purposes may all be included under the more general purpose of *examination*.

(*e*). To aid in learning immediately and directly.

(*f*). To suggest the direction and objects of future investigation and study.

(*g*). To cultivate the power of clear and accurate expression.

3. **Form and character of questions.**

(*a*). Simple and clear in language.

(*b*). Definite and direct in meaning.

(*c*). Should not contain the answer, nor be leading.

(*d*). Should admit of but one correct answer.

(*e*). Questions of examination should not go beyond what the pupil ought to know.

(*f*). Elliptical questions may be employed, to a limited extent, in teaching young children.

(*g*). Questions for teaching should be consecutive and very carefully prepared.

4. **Manner in questioning.**

(*a*). Animated, with young children.

(*b*). Pronunciation distinct, in ordinary speaking tones, without repetition.

(*c*). Questions so put to the class that every one may expect to be called to answer; individuals then called.

(*d*). Examination questions upon topics just studied may be put rapidly; teaching questions usually slowly.

(*e*). Questions should not be read from a book, unless the nature of the subject makes this absolutely necessary.

5. **Answers.**

(*a*). Guessing and trying several times should not be allowed.

All necessary time should be granted for thinking, after the question is put, before the answer is demanded.

(*b*). Complete answers should be required, in good language and form, and, as far as practicable, in complete sentences.

(*c*). Simultaneous answering should be only sparingly employed.

(*d*). Proper credit should be given, especially to young children, for answers, even though defective and incomplete.

(*e*). Answers should be required in the pupil's own language, with only obvious and necessary exceptions.

Pupils should be trained in questioning each other upon topics previously assigned, but no question should be allowed which the questioner is not prepared to answer.

C.

Order of Moral Development, etc.

1. **Obedience to authority** should be taught and enforced very early in a child's life, before obligations and duties can be understood.

2. **A habit of Obedience,** of right doing, is thus formed, while the intuitive perception of right is very indistinct.

3. **An impulse to right conduct** begins now to be felt in the soul in consequence of the feeling of satisfac-

tion or dissatisfaction produced by the power of habit and by the moral sense, according as commands and requirements are obeyed or disobeyed.

4. **The Moral Judgment** now begins to act in accordance with the teachings of the moral sense, and the instructions of parents and others.

5. **Conscience** begins to insist on obedience to the decisions of the Judgment, and to cause strong feelings of approbation or disapprobation, according as obedience is or is not rendered.

6. **The parent and teacher,** while this process of development is going on, should give practical instruction, in all proper ways, in respect to relations, obligations, and duties to

(*a*). Parents, and other relatives.

(*b*). Associates, neighbors, and friends.

(*c*). School, teachers, and society.

(*d*). State, country, and civil authorities.

(*e*). Mankind, and the Supreme Ruler.

7. **Penalties,** of a suitable character, may be inflicted for the violation of moral obligations and the neglect of duties.

D.

Oral Teaching.

Oral teaching embraces several varieties of work. The natural reaction against the misuse and abuse of text-books has caused the value of this kind of teaching to be over-estimated. It will be employed by all wise teachers, to a greater or less extent, in all departments, but especially with young children.

E.

Examinations.

1. Uses of Examinations.

(*a*). To make the teacher acquainted with the pupil s ability and acquirements, for purposes of classification and instruction.

(*b*). To incite pupils to study and to retain knowledge.

(*c*). To give parents an opportunity and the means of judging of the work and progress of their children.

(*d*). To test the methods and efficiency of teachers, and of the school.

(*e*). In some studies, an examination should chiefly test the memory; in others, the acquired power to think, judge, reason, and apply principles.

2. Abuses of Examinations.

(*a*). To make them productive of undue anxiety and nervous excitement on the part of industrious and faithful pupils.

(*b*). To make them too protracted, and too exacting either upon pupils or teachers.

(*c*). To make them the means of converting teachers into machines for examining and marking papers.

The extra and unprofitable labor thus imposed upon teachers subtracts largely from the reserve power needed for the proper work of teaching.

(*d*). To make them means of encouraging "cramming" and dishonesty.

(*e*). To make them tests of memory alone.

(*f*). To make them the sole, or even the chief criterion of determining promotions.

3. Methods of Examinations, etc.

(*a*). *Oral.* This is the only practicable method with young children, and it should be used to a considerable extent in all grades.

If rightly employed, it cultivates (1) attention, (2) self-possession, (3) readiness of memory, and (4) facility of expression.

In many cases it affords better opportunity of testing both the acquisitions and ability of pupils than writing.

(*b*). *Written.* This method should be employed, to some extent, as soon as children are able to write with tolerable rapidity and legibility, and largely with advanced pupils.

It cultivates the habit (1) of thinking carefully, and (2) of composing and writing accurately.

This method affords means of preserving evidence of success or failure on the part of the pupil, which is sometimes a matter of importance to teachers and other examiners.

(*c*). *Frequent, Short, Informal.*

Every recitation is an examination in the work of a day; a review may be an examination in the work of a week, or of a month. If pupils are properly instructed and "drilled," short, informal examinations may be frequently made, either oral or written, without previous notice.

(*d*). *Questions.*

These should always be (1) clear, (2) definite; relate to that which is (3) essential and important, not to the (4) incidental and trivial; test (5) results rather than (6) means.

(*e*). *Answers.*

Should also be (1) clear, (2) definite, (3) in good language, in (4) full sentences or not, as required.

The credit to be given for the right answer to each question, in a written examination, should be fixed beforehand, but defective answers should receive some credit when they indicate honest effort and some knowledge.

XXII.

School Management.

Considered under two general heads, (1) School Organization and (2) School Management.

Organization is one of the means of governing; right instruction also helps to govern, and right government instructs.

(1). School Organization.

(*a*). Organizing a school is putting it into good working condition. It includes enrollment, seating, classification, programme of recitations and exercises, and all other necessary preliminary arrangements.

The aim should be to put every pupil in the proper place, and at the proper work in the shortest possible time.

(*b*). Two classes of schools require separate consideration.

(*A*). Common District Schools.

(*a*). *Officers*. (1) Number, (2) election, (3) time of service, (4) powers and duties, (5) relation to the organization and government of the school.

(*b*). *General Condition* of district schools in respect to (1) houses and furniture, (2) apparatus, maps, charts and library, (3) courses of studies, (4) classification, (5) records, (6) rules and regulations.

(*c*). *Character and Success* of these schools depend almost entirely upon the teacher; very little help can be had from others.

(*d*). *Knowledge desirable* before entering such a school (1) of the general character of the people of the district, (2) of the officers, (3) of the previous history and character of the school, (4) of the classes, studies, etc.

(*e*). *A definite plan* of work for the first day, and a general plan of organization, should be carefully prepared beforehand.

This is of especial importance to a teacher of little experience; it may not be possible to follow every detail of the prepared plan, but it will be none the less valuable on that account.

(*f*). *The opening exercises* and the general management of the first day should be, as nearly as possible, like the exercises and management determined upon for the term.

(*g*). *Order of work* after the opening exercises.

(1). Assign lessons to pupils old enough to study,—lessons which require study,—and name the temporary order of recitation.

(2). Provide work for pupils too young to study lessons.

(3). Take names etc., quietly, and make such arrangements about seating as may be necessary.

(4). *Commence hearing and teaching* classes as soon as the preliminary work is completed.

(5). *Recesses and movements* of the school should be at the time and in the manner arranged, in the plan of organization, for the term.

(6). *A programme of exercises* for the next day should be announced or placed upon the blackboard before the close of school.

Take the classes, for a time, as they have previously been; make necessary changes gradually; the first recitations are, to some extent, examinations.

(7). *Announce few or no rules;* assume that pupils will be orderly and obedient; require the order, on the first day, which you intend to require on subsequent days.

(*h.*) *A permanent programme* should be made within the first week, which should include:

(1.) Order and time of recitations.

(2.) Time for preparing each lesson.

(3.) Time for recesses, etc.

(4.) Time for general exercises, questions, necessary business, etc.

(*i*). *Number of classes.*

(1.) Usually unnecessarily large.

(2.) Reduce gradually by topical lessons and other means.

(*j*). *Division of time* for classes and recitations determined by (1) age of pupils, (2) size of classes, (3) character of studies, (4) special circumstances.

(*k.*) *Movements of classses*, and of the school generally, made (1) quietly, (2) promptly, (3) uniformly, (4) by signals of some kind, not too numerousn or too formal.

(*l*). *Records should be kept*, such as are required (1) by law, (2) by school officials, (3) by interests of the school.

(*m.*) *Advantages* of prompt organization.

(1.) Favorable influence upon pupils.

(2.) Good effect upon the officers and patrons of the school.

(3.) Effect upon the teacher, and upon the subsequent work of the school.

(3.) Direct influence upon the government of the school.

B. Graded Schools.

(*a.*) A graded school is a school in which there are regular and consecutive courses of studies and instruction; in which pupils, classified and grouped according

to their attainments, pursue these courses in an assigned order; and in which the principle of division of labor among teachers is adopted.

(*b*.) *Grades and Departments.*

(1.) The term *Grade* usually denotes the pupils belonging in any one year of a course of studies; sometimes the studies of one year in a course.

A grade may constitute a single class, or may be subdivided into two or more classes.

(2.) A *Department* consists of several consecutive grades; usually three or four. The large graded schools of Michigan have three Departments, the Primary, Grammar, and High School; and twelve Grades, four in each Department.

(3). The extent and character of courses of studies; the number of departments, grades, and classes, should be determined by a wise regard for (*a*) local conditions and circumstances, and (*b*) by the number and qualifications of teachers.

(*c*). *General organization* of such schools.

1. **The School Board.**

(*a*). Number of members: election; time of service.

(*b*). Organization and officers of the Board.

(*c*). Powers and Duties of the Board.

(1). Determine the internal organization of the school.

(2). Establish rules and regulations in respect to Superintendent, Teachers, and Pupils.

(3). Determine courses of studies and text-books.

(4). Appoint and dismiss teachers, and fix their salaries.

(5). Have the general management and control of school property and school affairs.

2. The Superintendent.

This term, like the title "Professor," endures great suffering and abuse. Our "Profession" would command higher respect if Teachers were content to be called simply Teachers.

The Superintendent is the executive officer of the Board in all matters relating to the internal management of schools. His specific duties vary somewhat in different localities, but usually include the particulars named below.

(1). To advise and recommend in relation to courses of studies and instruction, text-books, apparatus, furniture, etc.

(2). To advise in respect to the qualifications and appointments of teachers.

(3). To have general oversight of the instruction and discipline of the schools, and to aid and direct teachers in cases of difficulty.

(4). To direct in relation to the examinations and classification of pupils, or personally do this work.

(5). To instruct teachers in methods of teaching and and management.

(6). To keep such records and make such reports as the Board direct.

The position of Superintendent is one of great responsibility and delicacy. In many respects, he stands between the Teacher and the Board, and between the Teacher and the Public.

It is of importance that he have high ideas of honor and justice; that he have great equability of temper; suavity of speech and manner, and be not liable to the influence of prejudice.

3. The Teachers.

Only such relations and duties as are peculiar to graded schools are indicated here.

(1). They should observe carefully and cheerfully all rules of the Board, and all instructions and suggestions of the Superintendent.

(2). While individuality should not be sacrificed, they should adopt and follow the general methods and plans of the school; and should adhere to the prescribed courses of studies and text-books.

(3). They should consult freely with the Superintendent in cases of real diffiulty, but should remember that unnecessary appeals to his authority seriously weaken their own power to manage and govern pupils.

(4). They should deal honorably and justly, in all things, with associate teachers; and should labor for the good of the school as a whole, as well as for individual success.

4. Grading of Pupils.

Grading consists (*a*) in placing pupils in grades and classes according to their attainments, and (*b*) in grouping a number of consecutive grades into a Department.

Grading involves classification, and must be based upon proper examination, and regulated by some standard of acquirements.

The standard of grading in ordinary cases, must be the general average of attainments in all the studies of a grade or class. This average should be determined more by the daily recitations than by a final examination.

A fair degree of flexibility must be allowed in any standard, especially where a considerable proportion of the pupils can be in school but a limited time.

Special circumstances and the comparative practical value of particular studies should be considered.

5. Examinations for Grading.

These must necessarily be made by the Superintendent, or under his oversight and direction.

Teachers will render such aid as he requires. (Other suggestions will be found under the special topic of "Examinations.")

6. **Records and Reports.**

(*a*). Necessarily more extensive and complex than in district schools.

(*b*). Prescribed by the Board or Superintendent, and blanks prepared and explained.

(*c*). Should show, at least, the (1) Attendance, (2) General Deportment, and (3) Progress of pupils in studies.

7. **Rules** in relation to duties of teachers, and pupils, and concerning other matters.

(*a*). The larger the organization the more numerous the rules.

(*b*). General and most important rules made by the Board.

(*c*). Minor rules made, from time to time, by the Superintendent.

(*d*). Rules should allow proper room for the individuality of teachers in their special classes and work.

2. School Government.

The government of a school is the control and direction of its pupils, and all of its internal affairs, by some legitimate authority.

(*A*). **General Principles.**

(*a*). The ends of school government are

(1). To maintain order, and secure obedience on the part of pupils.

(2). To teach respect for law and authority.

(3). To create in pupils the habit of self-government.

(*b*). School government, to secure these ends, must have

(1). Right principles and rules of administration.

(2). An efficient executive head.

(*c*). Young children must be governed, for the most part, by specific rules; older pupils should be governed, and should govern themselves, by general principles.

(*d*). The administration of all human governments is based upon one of two principles:

(1). The principle of restraining and coercing the desire of activity in the governed, or

(2). The principle of guiding and directing this, and allowing large freedom of action.

(*e*). The practical problem in school government, as in all government, is

(1). To secure order, and the necessary unity of purpose and action, and

(2). To allow all possible liberty to each individual.

The school must be an organic whole. This is an absolute necessity. At the same time, the restraint upon individuals should be as little as possible.

(*f*). Specific rules should be few, and should be such as to commend themselves to all right-minded pupils.

(*g*). Prohibitions should not be such as to suggest and provoke offences.

It may be assumed that the ordinary rules of propriety and good behavior are understood by pupils, and that only such requirements and prohibitions are to be made as relate to new and special relations and duties.

(*B*). Administration of school government.

In small schools the maintenance of authority and order depends almost entirely upon the *personal* power and force of the teacher; in large schools the *organic* forces,—the machinery and movements of the organization,—are important factors in the government.

(*a*). *General Suggestions.* "It is wiser to prevent offences than to punish them;" to avoid collisions than to conquer adversaries; request rather than command.

(*b*). *Elements of Personal power in the teacher* needed in governing.

(1). Character,—manhood,—womanhood.

(2). Self-knowledge, self-control, and self-respect.

(3). Knowledge of human nature,—of the motives which influence the will,—respect for pupils.

(4). Consciousness of power to govern.

(5). Determination to succeed; force of will.

(6). Manner, eye, voice, etc. (Huntington's Unconscious Tuition.)

(7). Tact,—"common sense,"—sound judgment.

(*c*). *Means of securing obedience without penalties.*

(1). Proper and sufficient employment; provision for physical activity in Primary Schools.

(2). Good teaching; teaching which commands interest and attention.

(3). Right public sentiment in the school.

(4). Right public sentiment among the patrons of the school.

(5). An understanding of the the true nature of law and obedience.

(6). Personal regard for the teacher.

(7). Proper appeals to the best emotions, affections, and desires (question of rewards, prizes, etc., belongs here.)

(8). Co-operation of school officers, parents, and other friends of the school.

(*d*). *Penalties, Punishments.*

(1). The primary purpose of school penalties and punishments is not retribution and vengeance. They are (*a*) for the protection and safety of the school, (*b*) for the restraint and, as far as possible, reformation of the offender.

(2). They should bear a natural relation, in character and extent, to the offence, as far as this is possible.

(3). They should not be unnecessarily irritating, and never degrading.

(4). To a large extent, they should consist in forfeitures and deprivations. (Suspension or expulsion is an extreme form of this.)

(5). In exceptional and rare cases, corporal punishment.

The right to inflict such punishment rests only on usage. Circumstances, conditions, and limitations are to be very carefully considered.

(*e*). In the administration of a public school the teacher is the agent of the school Board, and an officer of public law, not acting "*in loco parentis.*"

NOTE.—In connection with this topic, study School Law upon the following points:

1. A legally qualified teacher.
2. Examinations and certificates.
3. Contracts.
4. General duties.
5. Authority, (*a*) in the school, (*b*) outside the school.

XXIII.

Suggestions on Teaching Some Studies.

A.

Teaching Reading.

1. Reading is (*a*) the art of acquiring information from written or printed composition (reading for one's self), and (*b*) of conveying that information to others by the voice (reading for others).

2. The work of teaching reading may be divided into (*a*) Elementary or Primary teaching, (*b*) Secondary, and (*c*) Advanced teaching.

3. **Primary Teaching.**

(*a*). Purpose.—To help children in acquiring a written and printed vocabulary corresponding to their already acquired spoken vocabulary.

Children have, before entering school, associated objects, acts, qualities, etc., with the spoken signs; they have now simply to add a sign addressed to the eye.

(*b*). Methods of teaching in common use.

(1) Alphabetic, (2) Word and Sentence, (3) Phonic.

(*c*). Laws which should determine the methods to be employed: 1 and 5 of Acquisition; 1, 4 and 6 of Teaching.

(*d*). Order of work.

(1). By the use of objects, acts, pictures, etc., teach words as wholes, and have pupils copy them on slates or paper.

Books may be used from the beginning, but all new words should be printed or written upon the blackboard. The names of letters may be taught, and oral spelling also from the first. Words may be combined into short sentences immediately.

(2). Teach gradually and very carefully the sounds of the letters by analyzing simple words (Phonic work).

Begin with the short sounds of the vowels and teach, one by one, the diacritical marks.

(3). Teach, also gradually, how to learn and to form new words by the Phonic method.

In this way all the advantages of both the word and phonic methods are secured.

(4). Have pupils copy on slates all words and sentences learned, and also reproduce them from memory.

Spelling is thus learned by the most natural and most effectual method. Oral spelling should also be constantly practiced.

4. Teaching in the second stage.

(*a*). Purposes :—

(1). To aid pupils in enlarging their written and printed vocabulary.

(2). To begin the classification of letters and sounds.

(3). To teach pupils how to acquire information from books:—the art of reading for one's self.

(4). To teach practically the art of reading for others;—vocal expression proper for children.

(5). To give constant practice in writing correct sentences; short stories from dictation or memory, etc.

(*b*). Laws for special reference;—2, 3 and 6 of Acquisition; 2, 3 and 5 of Teaching.

(*c*). Order of work, etc.

(1). Teach carefully the pronunciation and meaning of all new words.

(2). Continue teaching the sounds of letters and diacritical marks,

(3). Exercise great care in selecting and assigning lessons.

The use of capital letters, of marks of punctuation, and of all other marks used in the reading books, should be taught as they occur in the lessons.

(4). Give much *practice* in right articulation, emphasis, inflection, etc.; teach very few *rules*.

5. **Advanced Teaching.**

(*a*). Purposes:—

(1). To teach how to analyze and study critically a reading exercise.

(2). To teach the art of expression, and the most obvious rules for good reading.

(3). To complete the classification of letters and sounds.

(*b*). The general laws of teaching will suggest methods of working adapted to this period.

The proper teaching of Reading necessarily involves, during the first two years of school life, the teaching of spelling, writing, and "language lessons."

B.

Spelling.

1. **Spelling** is naming or writing the letters and other marks used in forming printed words, in right order.

2. **Purposes** in teaching.

(*a*). To enable pupils to write words correctly, and

(*b*) To determine by the eye whether the words of a written or printed composition are correctly spelled.

3. **Two things** to be considered.

(*a*) The lessons; (*b*) methods of teaching.

4. **The lessons** should be composed of words in most common use. These will be found in the

(*a*). Pupil's spoken vocabulary.

(*b*). Reading and other text-books.

(*c*). Spellers and Dictionary.

(*d*). Newspapers and Periodicals.

(*e*). Selected dictation exercises.

5. **Methods of teaching.**

(*a*) Oral, and (*b*) written.

Young children, of necessity, must spell orally, to a considerable extent, in order to get sufficient practice. Spelling should be, more and more, by writing as pupils become able to write rapidly and legibly.

Spelling by writing should be so conducted as not to impose unnecessary labor upon teachers.

6. **Suggestions,** etc.

(*a*). The spelling of the first years should be mostly in connection with lessons in reading, words and sentences being first copied, and afterwards reproduced from memory.

(*b*). All written school exercises should be lessons in spelling.

(*c*). The laws of association should be observed in teaching spelling.

(*d*). The *meaning* of words is best taught in connection with lessons in reading.

(*e*). A few rules should be taught inductively to advanced pupils.

(*f*). A habit of observing new or unusual words, when reading, aids much in learning to spell.

C.

Geography.

1. **Divisions of work,—**

(*a*) Primary, (*b*) Secondary or Grammar grade, (*c*) Advanced.

2. **Primary work.**

(*a*). *Purposes*:—

(1). Cultivation of the observing faculties, and of the power of expression.

(2). Teaching of position, direction, distance, etc., and the terms used to designate these.

(3). Instruction in drawing simple outline maps.

(4). Teaching of natural divisions of land and water, and their names.

(5). Outlines of the world appropriate to the age, and details of immediate surroundings.

(*b*). *Order and method of work.*

(1). Begin with the school room, house and surroundings. Make teaching objective and concrete.

(2). Draw outlines of tables, desks, school-room, yard, streets, etc.

(3). Teach outlines by means of globe and outline maps.

(4). In detail work, associate persons, events, anecdotes, productions, industries, etc., with places.

The work of the first year should be mostly oral. The Primary text-book should afford matter for conversation rather than for the exercise of mere verbal memory.

3. Secondary or Grammar grade work.

(*a*). *Purposes*:—

(1). To teach a general outline of the subject.

(2). To teach details, beginning at home; less and less of minute detail as the work goes farther away from home.

(3). To teach something of explorations, travels, commerce, history, biography, etc., in connection with places.

(*b*). *Order and method of work.*

(1). Teach globe and outline maps thoroughly.

(2). In teaching details, group and associate by the laws of association and suggestion; that is, by natural physical conditions, by lines of travel, by commercial and other relations, etc., etc.

(3). Make large use of books of exploration, travel, history, biography, etc.

(4). As far as possible, in all countries, select a few geographical, historical and commercial centers, and around these group all other points and objects of study.

(5). Require frequent reproduction by pupils, orally and in writing, of associated instruction.

4. Advanced work.

(*a*). *Purposes* :—

(1). To review the general subject.

(2). To teach the higher generalizations of Physical geography.

(3). To teach historical geography, both Physical and Civil.

(*b*). Order and method are sufficiently indicated by the laws of Teaching.

5. *Guiding Laws.*

Laws of Teaching, 1 to 5, page 54; Laws of Retention and Reproduction, Primary, 1 to 3, page 15.

D.

History.

BY MISS J. A. KING.

1. **Divisions** of work.

(*a*) Primary, (*b*) Secondary or Grammar grade, (*c*) Advanced.

2. **Purposes** of work.

(*a*). Primary.

(1). To awaken an interest in historical studies.

(2). To add to the vocabulary, and cultivate expression.

(3). To secure familiarity with suitable historical facts.

(*b*). Grammar or Secondary.

(1). Same as primary work.

(2). To form clear conceptions of related events in any epoch.

(3). To develop details in their external or chronological sequence.

(*c*). Advanced.

(1). To secure familiarity with historical literature.

(2). To cultivate the power to select and discriminate.

(3). To discover the development of principles as shown in the causes and relations of events.

3. **General order** of work.

(*a*) Teach, (*b*) Reproduce, (*c*) Combine, (*d*) Compare, (*e*) Use.

4. **Special directions** for work.

(*a*). Primary.

(1). Teach by picture, story, conversation and reading from primary history.

(2). Reproduce by written exercise with occasional oral recitation.

(3). Combine the parts of continuous events, and events of brief periods.

(*b*). Grammar.

(1). Give a whole period by synoptic tables.

(2). Read the period, or epoch, from suitable text-book.

(3). Develop lines of events, as

Civil and military.
National industries.
Historical geography.

(*c*). Advanced.

(1). Pursue topical reading.

(2). Develop course of events, as

Constitution, government, and laws.

Religion, society, and customs.

Science and fine arts.

Literature, etc.

(3). Require results of research in written themes.

5. Guiding Laws, 1, 2, 3 and 6 of Teaching; Pages 54-55.

E.

Language and Grammar.

BY PROF. AUSTIN GEORGE.

1. Language Lessons.

(*a*). *Purpose.*—To teach and train children to speak and write correctly.

This requires attention to

(1). Enlargement of the vocabulary,—acquisition of words, including meaning, spelling, pronunciation.

(2). Use of words combined in sentences to express ideas.

(3). Practice in manuscript work,—paragraphing, capitalization, punctuation, etc.

(*b*). *Methods and Means of work.*

(1). Real objects,—questions by teacher on names, parts, properties, etc.; answers by pupils in correct sentences, both orally and in writing.

(2). Pictures,—treatment same as with objects.

(3). Stories read or told by teacher; oral and written reproduction by pupils.

(4). Memorizing choice selections, and conversation about these.

(5). Correction of local inaccuracies.

An intelligent plan is necessary under each head; questions should be pre-arranged.

2. Word Studies.

(*a*). As to form,—abbreviations, contractions, etc.

(*b*). As to meaning,—compound words, prefixes, suffixes, derivations, etc.

(*c*). Diacritical marks,—preparing for the understanding and use of the dictionary.

It should be kept constantly in mind that children learn to speak by imitation; that ability to speak comes by speaking; ability to write by writing; and that use (good or bad) crystalizes into fixed habits.

3. Guiding Laws.

Laws of Acquisition, 1 and 6, Pages 52 and 53.

Laws of Teaching, 1, 5 and 6, Pages 54 and 55.

Purposes of Childhood, No. 2, Page 56.

Purposes of Youth, Nos. 1 and 2, Pages 57 and 58.

4. Technical Grammar.

(*a*). *Purposes*:—

(1). To secure a knowledge of the mechanism of the language, and a comprehension of the principles which govern forms and agreements.

(2). To secure readiness and accuracy in the interpretation of language.

(3). To acquire facility in the correct use of language, both in speech and in writing.

(*b*). *Methods of work.*—Begin with the sentence as a whole; then consider its parts and their offices:

(1). Idea of subject and predicate; complement,—object and attribute; parts of speech, and the classification of words into nouns, verbs, etc.; adjuncts,—of single words, of several words.

(2). Consideration of sentences according to nature and use; as declarative, interrogative, exclamative, imperative.

(3). Consideration according to structure; as simple, compound, complex.

(*c*). *Phrases and Clauses.*

(1). Structure and office.

(2). Equivalency,—interchange of words, phrases and clauses.

(*d*). *Etymology.*

(1). Sub-classification of parts of speech.

(2). Inflection of nouns, verbs, etc.

(3). Connectives;—(*a*) introducing phrases; (*b*) introducing clauses; (*c*) joining like constructions.

5. **Grammatical Analysis** is the classification of a sentence, and the naming of the offices and relations of its members and their adjuncts.

6. **Parsing** is the complete classification of a word (or inseparable phrase), and an orderly naming of all that is grammatically of interest to it.

In analysis, diagrams are a condensed and useful method of representing the work to the eye. Parsing may be concisely written in tabular form.

7. *Guiding Laws.*—The general laws of advanced Teaching and the laws of elaboration.

F.

Arithmetic.

BY PROF. C. F. R. BELLOWS.

1. Divisions of the work.

(*a*) Primary, (*b*) Practical or Secondary, (*c*) Higher.

These divisions correspond more or less closely to the periods, respectively, of Childhood, Youth and Maturity. They distinguish, as it were, the aspects presented by the study and teaching of Arithmetic as viewed from the standpoint of the separate periods of development.

2. Primary Arithmetic.

(*a*). Scope of the work.

(1). Notation and reading of numbers to 100.

(2). The Tables of Addition, Subtraction, Multiplication and Division. Exercises applying knowledge of the Tables.

(3). The signification and notation of fractions to tenths, and exercises upon the same.

(4). The Table of U. S. Money and some of the most common Tables of Weight and Measure.

(*b*). Form of work.

The work is characterized chiefly by the large use which is made of objects as a concrete form of presenting numbers. Thus,

(1). Collections of things (counters) are employed as a form of expressing numbers.

(2). The Tables of Addition etc. are formed by the children with use of counters.

(3). The idea of the fraction is developed by the use of objects and numbers which the children are led to divide.

(4). The relations of the common units of measure and weight are found in the experience of the children in measuring and weighing.

(*c*). **Guiding Principles.**

(1). The interest of the child in bodily activities. (Laws of Teaching, No. 1, Page 54.)

(2). The relation of concrete and abstract ideas. (Laws of Acquisition, No. 4, Page 52.)

(3). The relation of ideas and symbols. (Laws of Memory, No. 4, Page 16.)

(*d*). **Faculties addressed.**

(1). The Senses and Presentative powers.

(2). The Representative powers in their incipient activity (See Pages 44–46 and 56–7.)

REMARK.—While it is true that primary work in Arithmetic is addressed chiefly to the Presentative faculties, still the coming activity of the Representative faculties should be properly anticipated.

3. Practical Arithmetic.

(*a*). **Scope of the work.**

(1). The Fundamental Rules.

(2). Factoring, Cancellation, etc.

(3). Fractions,—(1) Common, (2) Decimal.

(4). Weights and Measures.

(5). Ratio and Proportion.

(6). Involution and Evolution.

(7). Percentage.

(*b*). **Form of the work.**

If use of objects characterizes the work of Primary Arithmetic, the use of figures is no less the prominent feature of Practical Arithmetic.

(*c*). **Guiding Principles.**

(1). The interest of the pupil in the acquisition of practical knowledge.

(2). The activity of the Representative powers, as appealed to in the symbolism of number, operation and relation. (See Pages 47 and 57–8.)

(*d*). **Faculties addressed.**

(1). The Presentative powers.

(2). The Representative powers.

(3). The Elaborative powers (in a degree).

(*e*). *Accordingly considerable prominence is given,*

(1). To the development of full and clear ideas of things.

(2). To the statement of definitions.

(3). To forms of solution and other written work.

(4). To the description of operations; statement of rules, etc.

(5). To explanations or the rationale of operations.

REMARK.—The largeness of the place given to explanations, properly so-called, and to logical analysis of problems should be determined by the degree of activity of the reasoning powers of the pupil.

4. Higher Arithmetic.

(*a*). **Scope of the work.**—Arithmetic as a system of knowledge—a Science.

The work is characterized,

(1). By its abstract nature.

(2). By the large use made of the literal notation.

(3). By the ends had in view, which are,

(*a*). The investigation and demonstration of principles and rules.

(*b*). The development of a comprehensive and general view of Arithmetic.

(*c*). The consideration of the various topics or divisions of Arithmetic in their relationships to each other as members of a system of knowledge.

(*b*). **Guiding Principles.**

(1). The interest of the pupil in the perception and pursuit of general truths.

(2). Inclination of the mind toward a scientific arrangement of knowledge. (See Pages 59–60.)

(3). The relation of Analysis and Synthesis.

(*c*). **Faculties addressed.**

(1). The Presentative powers.

(2). The Reproductive and Representative powers.

(3). The Elaborative powers (pre-eminently).

(*d*). **Forms of mental activity.**

(1). Abstraction. (2). Generalization.

(3). Classification. (4). Scientific Imagination.

(5). Reasoning.

(See Pages 19–23.)

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